REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the following discussion, is respectfully requested.

Claims 1-15 are currently pending in this application.

In the outstanding Office Action, Claims 1-15 were rejected under 35 USC §102(e) as being anticipated by Mori (U.S. Patent No. 6,330,446).

Claim 1 of the present application is directed to a location register for carrying out location registration of a mobile communication terminal. Claim 1 recites that a location register has first storage means for storing information concerning movement status of a mobile communication terminal. The location register has a first determination means for determining a period of location registration of said mobile communication terminal according to the information concerning movement status that is stored in the first storage means. The location register also includes first registration means for transmitting said period of location registration that was determined by the first determination means, to the mobile communication terminal. The first registration means also receives location information transmitted from the mobile communication terminal in response to the transmitted period of location registration and carries out location registration of said mobile communication terminal according to said received location information.

In a non-limiting embodiment, the storage means (14) stores a location information administration table (16a), which is contained in a location register (16) that is remote from a mobile terminal.[1] The location information administrative table includes ID's of a plurality of mobile communication terminals, respective location information items of the plurality of mobile communication terminals, and respective number of stays[2]. The number of stays is information indicative of how long the mobile communication terminals (12) stay in the same

[1] Specification page 8, lines 9-15.
[2] Specification page 8, lines 16-20.

location registration area.[3] A location registration period determination section 18 determines a time period of location registration for the mobile communication terminal according to the number of stays, which were stored in storage section (16).[4]

The determination section (18) uses the number of stays to determine the period of time for location registration. If the number of stays of the mobile communication terminal (12) is less than a predetermined number, the location registration time period of the mobile communication terminal (12) is determined to be a normal location registration period.[5] If the number of stays of the mobile communication terminal (12) is at least a predetermined number, then the location registration time period of the mobile communication terminal (12) is determined to be a predetermined time period that is longer than the above-mentioned normal location registration time period.[6]

After the determination section determines the period to send to the mobile communication terminal, the registration control section (20) transmits the period of location registration, determined by the determination section (18), to the particular mobile communication terminal.[7] The registration control system then receives updates including the location information at times that correspond to the period sent to the mobile communication terminal.[8] The registration control system also carries out the location registration at different periods corresponding to the respective numbers of stays of the plurality of mobile communication terminals.[9]

The location register of Mori is materially different than the location register of claim 1. Mori describes determining the velocity of the mobile terminal and storing this in RAM

[3] Specification page 9, lines 3-6.
[4] Specification page 9, lines 10-15.
[5] Specification page 13, lines 17-24.
[6] Specification page 13, lines 24 to page 14 line 6.
[7] Specification page 14, lines 7-16.
[8] Specification page 14, lines 21-24.
[9] Specification, page 10, lines 9-13.

located in the mobile terminal.[10] The mobile terminal will then determine if its registration period is improper for its velocity.[11] For example, if the registration period is improper, the mobile terminal will request a new registration period from the location register.[12] The location register has the current registration period information for the mobile terminal stored in RAM 17 and also stores the new registration period in RAM 17 once it is confirmed that the mobile terminal has requested an increase.[13] The location register will then assign a new registration period to the mobile terminal, in which longer intervals are assigned for lower velocities.[14]

Turning now to the rejection of independent Claim 1, Applicants respectfully submit that Mori fails to disclose all of the elements of independent Claim 1.

The location register of Mori does not store information concerning movement status as is recited by Claim1. The Office Action cites to Mori col. 5 lines 33-57,[15] but that section of Mori only discloses a RAM storing a previous registration interval and new registration interval that is currently assigned to the mobile terminal.

Claim 1 recites a "...first storage means for storing information concerning a movement status of said mobile communication terminal..." Information concerning movement status is not the period of location registration. The determination means of Claim 1 also determines the period of location registration according to information concerning movement status.

Mori does not disclose that the determination of the period for location registration is determined "according to the information concerning the movement status of said mobile communication terminal stored in the first storage means" as Claim 1 recites. Mori cannot

[10] Mori, col. 5, line 12.
[11] Mori, col. 4, lines 24-34.
[12] Mori, col. 4, lines 31-34.
[13] Mori, col. 5, lines 32-41.
[14] Mori, col. 5, lines 37-39 and col. 6, lines 1-18.
[15] Office Action, page 3.

disclose this recited element because Mori does not disclose storing movement status information in the location register.[16] The location register of Claim 1 uses the stored movement status information to determine the proper period for location registration, not the mobile terminal.

Mori also fails to disclose that the determination means is a part of the location register. Mori discloses having the mobile terminal request an adjustment in its registration interval.[17] Claim 1 recites that the determination means determines the period of location registration. The determination means of Claim 1 is a part of the location register, not a part of the mobile communications terminal.

Mori is trying to reduce the number of communications between the mobile terminal and the location register because slow moving mobile terminals do not move out of the location registration area often.

Applicants respectfully submit that Claim 1 (and its dependent Claims 2 and 7) is patentably distinguished over Mori because Mori does not teach or suggest every element of Claim 1.

Turning now to the rejection of independent Claim 3 as being anticipated by Mori, Applicants respectfully submit that Mori fails to disclose all the elements of Claim 3.

The Office Action alleges that Mori discloses a second storage means for storing information concerning a frequency of incoming calls to the mobile communication terminal.[18] Mori does not disclose storing information concerning the frequency of incoming calls to the mobile communication terminal, but rather discloses how the location registration apparatus performs when a mobile terminal makes a request for a new registration interval. Specifically, if the mobile terminal determines that it needs a new registration interval it will

[16] Claim 1 recites "...transmitting said period..."
[17] Mori, Col 5, lines 34-37.
[18] Office Action, page 3.

make a request to the location register.[19] Then the control unit of the location register increases or decreases the registration interval by a predetermined amount.[20] The mobile terminal determines whether to request a new interval based on its velocity, not the location registration apparatus.[21] Mori further discloses an alternative way to calculate velocity, but does not disclose anything about the frequency of incoming calls.[22]

Mori discloses how a mobile terminal may determine its velocity by measuring the Doppler shift in the frequency of the carrier signal transmitted by the mobile terminal.[23] The frequency reference in Mori refers to the frequency of an electro-magnetic wave. The frequency in Claim 3 refers to the number of incoming calls (e.g. times/hour); not the frequency of an electro-magnetic wave.[24]

Mori also fails to disclose a second determination means for determining a period of location registration of said mobile communication terminal according to said information concerning said frequency of incoming call to said mobile communication terminal in said second storage means. As discussed above, Mori does not disclose storing the frequency of incoming calls, and thus cannot disclose using the frequency of incoming calls to determine a period of location registration.

Mori also fails to disclose that the determination means is a part of the location register. Mori discloses having the mobile terminal request an adjustment in its registration interval.[25] Claim 3 recites that the determination means determines the period of location registration. The determination means of the Claim 3 is a part of the location register and is not a part of the mobile communications terminal.

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[19] Mori, Col. 5, lines 37-38 and lines 44-45.
[20] Mori, Col. 5, lines 37-44.
[21] Mori, Col. 4, lines 29-35.
[22] Mori, Col. 5, lines 50-57.
[23] Mori, Col. 7, lines 4-10.
[24] Specification, page 18, lines 13-16.
[25] Mori, Col 5, lines 34-37.

Applicants respectfully submit that Claim 3 (and its dependent Claims 4 and 8) is patentably distinguished over Mori because Mori does not teach or suggest every element in Claim 3.

Turning now to the rejection of independent Claim 5, Applicants respectfully submit that the reference Mori fails to disclose all claimed elements of Claim 5.

Claim 5 includes similar elements as Claims 1 and 3. The difference between Claim 5 and Claims 1 and 3 is that Claim 5 uses both information concerning movement status and the frequency of the incoming calls. The Office Action cites to the same portions of Mori as in the rejection of Claim 3.[26] For the reasons given as to why Mori does not disclose all the elements of Claim 3, Applicants respectfully submit that Claim 5 (and its dependent Claims 6 and 9) is patentably distinguished over Mori.

Turning now to the rejection of independent Claims 10, 12 and 14 as being anticipated by Mori, Applicants respectfully submit that Mori fails to disclose all the elements of Claims 10, 12, and 14. Claims 10, 12, and 14 are method claims that contain similar elements as the Claims of 1, 3 and 5. For the same reasons given above, Applicants respectfully submit that claims 10, 12, and 14 (and their dependent Claims 11, 13 and 15) are patentably distinguished over Mori.

As Applicants have not substantively amended the claims in response to any rejection of record, should a further rejection be applied in the next Action based upon newly cited prior art, Applicants submit that such an action **cannot properly be considered a Final Office Action.**

[26] Office Action, pages 3-4.

Consequently, in view of the above comments, it is respectfully submitted that the pending Claims 1-15 are in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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